

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#13 Buthe 9.14.01

APPLICANT:

Konstantine Iourcha et al.

**SERIAL NO.:** 

09/371,972

FILING DATE:

August 10, 1999

TITLE:

System and Method for Rasterizing Primitives Using

Direct Interpolation

**EXAMINER:** 

Motilewa A. Good-Johnson

ART UNIT NO.:

2672

ATTY.DKT.NO.:

PA1774 US (as amended)

#### **CERTIFICATE OF MAILING**

I hereby certify that this paper is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on the date printed below:

Date:

9 501

Susan Yee

COMMISSIONER FOR PATENTS WASHINGTON, D.C. 20231

### Response to Informality Regarding Payment of Fees

Sir:

In response to the Informality Regarding Payment of Fee mailed August 27, 2001 (paper #12), Applicants submit the amendment was timely filed. The Office Action (paper #8) was mailed on May 4, 2001 with a shorten statutory period for reply set to expire 3 months from the mailing date (i.e., August 5, 2001). Subsequently, a Response was filed with a certificate of mailing dated July 19, 2001, within the 3 month time period to respond. Copies of the Informality Regarding Payment of Fee, the Response,

and the cover sheet of the Office Action showing the mailing date are enclosed for your review.

Applicants request that the Informality Regarding Payment of Fee be withdrawn and that the Response mailed July 19, 2001 be entered. Any questions or comments should be directed to Applicants' undersigned representative.

Respectfully submitted,

Konstantine Iourcha et al.

Date: 9/5/01

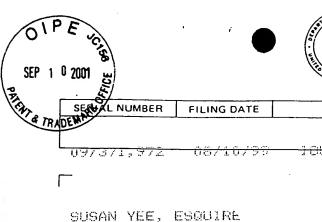
Зу:\_\_\_

Susan Yee, Reg. No. 41,388

Carr & Ferrell LLP

2225 East Bayshore Road, Suite 200

Palo Alto, CA 94303 Phone: (650) 812-3400 Fax: (650) 812-3444





I P E JOIS		· · · · ·		INITED STATE		urur on corre
1 <sup>0</sup> 2001 <sub>w</sub>				Patent and Tr	ademark Off	
- 2001			TATES OF	Address : COMMI Washir	ISSIONER OF PA ngton, D.C. 2023	TENTS AND TRADEMARKS
SERVAL NUN	<b>MBER</b>	FILING DATE	FIR	ST NAMED APPLICAN	r	ATTORNEY DOCKET NO.
T		رمسررممرو مع وروزيت	9 29d 48529d 475		l.e.	3594-118
03/3/19	3/2.	08/10/90	a unarrandiri		<u> </u>	
			s shadow di la cara			EXAMINER
SUSAN YI	EE.	ESQUIRE	WM21/0	© 25. 7		TOHNEON M
CARR & I	FERR	ELL, LLF			ART UNI	T PAPER NUMBER
2225 E. SUITE 2		SHORE ROAD			24.72	12
		A 94303 :			DATE MAILED	
						Technology Center 2601
						SEDEIV
	INFO	RMALITY RE PA		Technol 1320		
						Ology Con (U)
The informality	regar	ding the navmen	t of the fee in co.	noction with []	the estated fill	110 Zer 260
filed 7.23.0	01	is in	dicated below.	meetion with [] t	uie original iii	ing ree the amendment
A. FEE DUE						
				he funds in Deposit palance is due withi		
	21110101	it to cover the en	the ree due, The r	datance is due with	n use period se	t below.
						is insufficient to
		iod set below.	the attached Paten	Application Fee D	etermination K	ecord. Remittance is due
3 The a	a d a .				• . •	
Account	enamer t) the	fee as indicated	entered, since app Remittance or a	officant has failed to authorization is due	o remit (or aut within the peri	norize charge to a Deposit od set below.
					·	
4. [] The filin	ng fee	of \$	submitt	ed in this application	on is insufficie	nt.
			•			
A barane	ce or s		is due for ad	ditional claims.		•
5. 💢 EKT d	of Ti	ME (2 MONT	н)			
			•			
	APPL	ICANT IS GIVEN	THE REMAINDER	OF THE SET PE	RIOD FOR RI	ESPONSE,
	OR ON	NE (I) MONTH FI	ROM THE DATE OF	THIS LETTER, W	HICHEVER IS	LONGER,
		N MINCH TO KE		<u> </u>	08	
B. EXCESS PAY	MENT	:				
lt is not the appl	ed tha	t payment of \$ . See the attach	ed Patent Applicat	excess of the amoui	nt necessary to	cover the claims now in
		Jos are accaell	· · · · · · · · · · · · · · · · · · ·	ion i ee Deteiminati	on Record.	

### B. EXCESS PAYMENT:

This matter of refund or credit to your account is being referred to the Finance Officer, for his consideration.

09/371, 972 (burcha)

### UNITED STATES JEPARTMENT OF COMMERCE **Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

APPLICATION NO. FIRST NAMED INVENTOR **FILING DATE** ATTORNEY DOCKET NO.

09/371,972

08/10/99

TOURCHA

k. 3594-US

ARNOLD M DE GUZMAN ESQ

FENWICK & WEST LLP TWO PALO ALTO SQUARE PALO ALTO CA 94306

WM02/0504

**EXAMINER** 

GOOD TOHNSON M **ART UNIT** PAPER NUMBER

2672

DATE MAILED:

05/04/01

RECEIVED

MAY 0 9 2001

FENWICK & WEST LLP.

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

Due: 11 Due: Docketed By: 10 Atty Checked & Initialed: Date:

AECENED TOOL SEP TOOL SEP TO TOOL SEP TO TOOL TOOL TOOL TO TOO



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:

Konstantine Iourcha et al.

SERIAL NO.:

09/371,972

FILING DATE:

August 10, 1999

TITLE:

System and Method for Rasterizing Primitives Using

Direct Interpolation

**EXAMINER:** 

Motilewa A. Good-Johnson

ART UNIT NO.:

2672

ATTY.DKT.NO.:

PA1774 US (as amended)

### **CERTIFICATE OF MAILING**

I hereby certify that this paper is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Box Non-Fee Amendment, Commissioner for Patents, Washington, D.C. 20231, on the date printed below:

Date: -1/18/11

Susan Vee

PECEIVED SEP J 3 2001

BOX NON-FEE AMENDMENT COMMISSIONER FOR PATENTS WASHINGTON, D.C. 20231

Response to Restriction Requirement

Sir:

In response to the Office Action mailed May 4, 2001 (paper #8), Applicants submit the following amendments and remarks.

### In the Claims:

Please remove claims 19-22 from examination without prejudice.

### **REMARKS**

In the Office Action of May 4, 2001, the Examiner required restriction of prosecution to one of the following inventions: Group I containing claims 1-18, 23-27 and Group II containing claims 19-22. In response, Applicants are provisionally electing Group I with traverse.

To require election/restriction under MPEP § 806.05(d), "The examiner must show, by way of example, that one of the subcombinations has utility other than the disclosed combination" (see MPEP § 806.05(d)). Applicants submit that the election/restriction requirement here is improper because the Examiner failed to show that the inventions in Groups I and II have separate utilities.

Specifically in Group I, claims 1-7, 9-12 and 16-18, are drawn to a method of rendering a graphic primitive. Claim 8 is drawn to an electronically-readable medium storing a program for permitting a computer to perform the method as described in claim 1. Claim 13 is drawn to an electronically-readable medium storing a program for permitting a computer to perform the method as described in claim 9. Claim 14 or 15 is drawn to a system for rendering a graphic primitive. It should be noted that both claims 14 and 15 recite, inter alia, an interpolation engine, which is the claimed invention in Group II. Claims 23-26 are drawn to a method of generating interpolated values for use in rendering a graphic primitive. Claim 27 is drawn to an electronically-

readable medium storing a program for permitting a computer to perform the method as described in claim 23.

In Group II, claims 19-22 are drawn to an *interpolation engine* for use in a graphic system. The interpolation engine comprises a ratio pipe configured to a ratio value associated with a point in a graphic primitive or in an edge of the graphic primitive and a blending pipe configured to output interpolated values of texture coordinates. It should be noted that the interpolated values of texture coordinates generated by the interpolation engine are used to *determine values of any interior point within a graphic primitive* (see the Specification, page 14, lines 24-25; page 20, lines 3-5 and lines 12-14; page 20, line 20 – page 21, line 2; and page 21, lines 8-13). It should also be noted that the *interpolation engine* in claims 19-22 of Group II is recited as an element in claims 14 and 15 of Group I.

Applicants submit that even though the claims in Group I and Group II cover different scope and aspect of the present invention, they are directed to *a common inventive effort or concept*, that is, to use "direct interpolation to generate a value for any point in a graphic primitive without necessarily traversing other portions of the primitive" (see the Specification, page 5, lines 6-8). In addition, the claims in Group I and Group II have *a common utility*, that is, to interpolate "values in primitives without requiring separate hardware for the setup and rasterization stages" (see the Specification, page 5, lines 5-6). Furthermore, Applicants submit that the examination of the claims in Groups I and II does not require different fields of search.

To support the election/restriction requirement, the Examiner stated in the Office Action that "invention I has separate utility such as merging or overlaying video signals to generate a composite graphic image" and "invention II has separate utility such as scaling of video image signals for a scaled graphic image." Applicants respectfully traverse. Applicants respectfully submit that the different functions performed by the claims in Group I and Group II are not separate utilities. Rather, they reflect different aspects of a common utility in the present invention, that is, to interpolate "values in graphic primitives without requiring separate hardware for the setup and rasterization stages" (see the Specification, page 5, lines 5-6).

In view of the foregoing, Applicants respectfully request that the election/restriction requirement be withdrawn upon reconsideration.

Respectfully submitted,

Konstantine Iourcha et al.

Date: 1/19/01

By: Jusan Lee

Susan Yee, Reg. No. 41,388

Carr & Ferrell LLP

2225 East Bayshore Road, Suite 200

Palo Alto, CA 94303

Phone: (650) 812-3400

Fax:

(650) 812-3444



# UNITED STATES PARTMENT OF COMMERCE Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

S	SERIAL NUMBER	FILING DATE	FIRST NAMED A	PPLICANT		ATTORNEY DOCKET NO.
(	09/371,972	08/10/99	TOURCHA	<u></u>	K	3594-05
				¬  -		XAMINER
			WM21/0827			
	BUSAN YEE, CARR & FERF				WAY-WNIT!	THISTARPER NUMBER
		SHORE ROAD				12
	SUITE 200 PALO ALTO C	^A @#@n@l		D	ATE MAILED:	
•	(Time to the time	,n /4000				08/27/01
	INFO	RMALITY RE PAYN	MENT OF FEE			
The ifiled_	informality regar 7·23·01	ding the payment	of the fee in connection with cated below.	th [] the	original filing	fee the amendmen
A. FE	EE DUE					
1.			complete in that the funds in refee due. The balance is d			
2.	_	ims as shown in th	incomplete response, in that e attached Patent Application			
3. 🔀	The amendme Account) the	nt has not been en fee as indicated.	ntered, since applicant has Remittance or authorization	failed to r n is due wi	emit (or autho thin the period	rize charge to a Deposit I set below.
4	The filing fee	of \$	submitted in this a	pplication i	s insufficient	
	A balance of \$	S	is due for additional clai	ims.		
5. 🔀	⊈ E¥T. •F ₹	ime (2 months)	,			
	OR Of	NE (I) MONTH FRO	THE REMAINDER OF THE OM THE DATE OF THIS LET IT THE FEE OF \$ 390	SET PERI	OD FOR RES CHEVER IS L	PONSE, ONGER,
B. EX	CESS PAYMENT	Γ:				
5	] It is noted tha the application	t payment of \$ n. See the attached	is in excess of the Patent Application Fee Det	he amount reermination	necessary to c Record.	over the claims now in
	This matter of	refund or credit to	your account is being referre	d to the Fi	nance Officer	for his consideration.
				B. Do	_	
			. Ci	LERK OF GRO	OUP	

PTOL-319 (REV. 3-82)